

# Naval Health Research Center Quarterly Update



WINTER 2007 - 2008

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## IMPORTANT DATES:

- **NEHC Conference**  
14-20 March 2008
- **CNS Meeting**  
12-15 April 2008
- **ACSM Conference**  
28-31 May 2008
- **FHP Conference**  
9-15 August 2008
- **HFES Meeting**  
22-26 Sept. 2008
- **ISDA Conference**  
25-28 October 2008

## Behavioral Health Needs Assessment (BHNAS)

In the late summer of 2006, the Chief of Naval Operations, Admiral Michael Mullen, issued a one page memorandum to his Vice Chief on a matter of growing concern, the mental health status of the Navy's expeditionary Sailors. Among the subjects mentioned in his "Blue-Gold" memo was the need to gain a rapid and accurate



assessment of the psychological well being of Sailors serving in ground combat roles in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) in Afghanistan. In response to the CNO's tasking, the Naval Health Research Center launched an unprecedented campaign to evaluate the mental health status of Navy personnel while they were actively engaged in combat operations abroad. This high priority project was dubbed the Navy

Behavioral Health Needs Assessment, or BHNAS.

**Deploying BHNAS.** Based on the US Army's highly publicized Mental Health Advisory Team studies of infantry soldiers and Marines in OIF, the Navy BHNAS ("bee-nas") project is led by Dr. Jerry Larson and CDR Dave Service of NHRC's Behavioral Sciences &



Epidemiology Department, and CAPT Robert Koffman, the Combat and Operational Stress Control Consultant to the Surgeon General. In essence a highly refined command assessment, the need was introduced to NHRC in October 2006 with the first BHNAS evaluations being conducted in Iraq just two months later.

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## Recent Activities

**20 DEC 07:** Dr. Jerry Larson participated in a kick-off meeting with the Department of Veterans Affairs and the interagency organizing committee for a working group entitled, "Advancing Research Standards for PTSD Interventions: A Working Group to Develop Guidance on Design and Evaluation of Clinical Trials". Dr. Larson was invited to serve as a member in the subgroup "Trial Implementation." The working group was

scheduled to convene in force in late Jan 08 to develop research recommendations for implementation of PTSD-related trials.

**8 JAN 08:** Ralph Nix and Martin Hill met with doctors, medics, and logisticians from the USAF's 1st Special Operations Medical Group at Hurlburt Air Force Base in Florida, home of the Air Force Special Operations

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# Behavioral Intervention on a Global Scale

The Department of Defense HIV/AIDS Prevention Program (DHAPP), headquartered at NHRC, San Diego, is proud to be an integral part of the President's Emergency Plan for AIDS Relief (PEPFAR), which is the single largest international health initiative in U.S. Government history dedicated to a single disease. DHAPP has worked diligently to continue efforts ensuring that, as part of the PEPFAR strategy, military populations, their families, and surrounding communities, were provided technical assistance and resources to expand the fight against HIV/AIDS.

Using PEPFAR and Department of Defense (DoD) resources, DHAPP provided HIV/AIDS prevention, care, treatment, and capacity-building support which has reached over 6 million troops and their families in Africa and around the globe. DHAPP's annual report provides an overview of the activities and accomplishments DHAPP has sponsored. Included is the training of 8

thousand military members to provide prevention education to their peers, who then reached over 700,000 troops and family members with those prevention messages. Activities around the globe supported over 300 counseling and testing centers, at which 73,000 troops were tested for HIV and received their results.

Throughout history, successful militaries have always recognized that "health is a readiness issue." The impact HIV currently has on the overall health of the forces in many militaries around the world is an issue that must be rigorously addressed.

DHAPP continues to fight HIV, alongside the U.S. Government and international military partners, with the intensity warranted by such a serious threat to military readiness and national security worldwide. DHAPP looks forward to sustained success as they continue the battle against HIV/AIDS.

## Recent Activities (cont.)

Command (AFSOC). Nix and Hill reviewed modeling tasks and patient conditions with the subject matter experts as part of a project to model AFSOC's Rapid Response Deployment Kit (RRDK), which provides medical coverage to special ops air squadrons in far-forward environments. The RRDK project is part of the Medical Modeling, Simulation and Mission Support department's ongoing efforts for the Air Force.

**9 JAN 08:** LT Marc Taylor met with medical department officers from the Survival, Evasion, Resistance, Escape (SERE) school, Naval Special Warfare Center and Naval Special Warfare Group One Logistics Support Unit to plan a second major study examining factors influencing stress resilience and human performance during Navy survival training. The first major study is still underway and has examined cerebral and neuroendocrine variables during extreme stress. This second study aims to examine the effects of specific psychological interventions on performance and posttraumatic stress symptoms secondary to stressful captivity-related events occurring during training.

**18 JAN 08:** The Secretary of the Navy was briefed on efforts to reduce traffic fatalities among Sailors and Marines. NHRC was mentioned in the presentation as being a member of the Virtual Center of Excellence (VCOE) for High Risk Behavior created to help curb

motor vehicle accidents. Dr. Jerry Larson is one of the primary authors of the "High Risk Matrix" that is employed by the VCOE, and a slide pertaining to the matrix may be added before the brief is presented to SECNAV. Then Naval Safety Center is also considering distributing the High Risk Matrix to the fleet as a tool for leaders to employ in managing their personnel and for use by command human factors councils.

**22 JAN 08:** VADM (ret.) Harold Koenig visited NHRC to present "Combat Stress Related Disorders." Admiral Koenig, a former US Navy Surgeon General, has been very supportive of NHRC over the years. He currently serves as an advisor to the Millennium Cohort Program. Thank you Dr. Tyler Smith for arranging this visit.

**24-26 JAN 08:** Dr. Heidi Kraft accepted an invitation from the Deputy Surgeon General, RADM Cullison, to be the keynote speaker at the Surgeon General's Leadership Conference. The subject of her address was on Combat and Operational Stress Control, and the impact of combat operations on Navy medical personnel. The conference was held in Maryland, and Dr. Kraft spoke at the dinner gathering on Friday, 25 Jan. Over 250 senior Navy Medicine leaders and their spouses attended this important function.

## BHNAS (cont.)

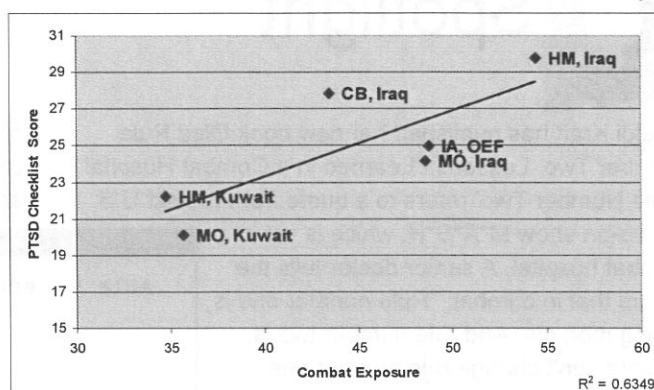
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**BHNAS Measurements.** The primary instrument employed in BHNAS was a 75 question written survey that captures 265 data points from each Sailor who volunteers to participate. The questions address a range of issues of interest to Navy leaders, including demographics, length of deployment, level of stress, the impact of deployment on family, and attitudes about seeking mental health care as a result of psychological trauma. Of particular interest is the extent of direct combat exposure, and responses to the clinically validated Post Traumatic Stress Disorder checklist, (PCL-C).

**BHNAS I Findings.** The first round of assessments were administered by Navy medical officers in-theater with more than 1,000 responses collected between January and May 2007. Among the Sailors evaluated were 352 enlisted Seabees, 251 Corpsmen, and 159 OEF Individual Augmentees ("IAs"). Approximately 11% of all Sailors who took the assessment were women. As illustrated in the figure, a clear dose-response relationship was revealed between combat exposure and heightened stress reactivity. Of note, OIF Corpsmen had the highest combat exposure of any group and collectively reported the highest degree of acute stress.

Overall, BHNAS showed the impact of OIF/OEF deployment to vary according to a Sailor's specialty (Naval Enlisted Classification code or officer designator), and their degree of exposure to combat conditions such as enemy attacks, proximity to hostile fire, and witnessing or participating in lethal action. Other notable findings from BHNAS I were:

- Sailors who reported experiencing intense fear, helplessness, and horror were almost **14 times** more likely to reveal signs of PTSD or other mental health issues.



HM = Corpsmen MO = Medical Department Officers (MC, DC, MSC, NC)  
CB = Enlisted Seabees IA = Individual Augmentees (enlisted & officers)

- Sailors who felt a strong sense of unit cohesion and leadership were **half** as likely to report mental health issues.
- Women Sailors exposed to combat did not show any greater incidence of mental health problems than men.
- About **one fifth** of expeditionary Sailors believed that seeking mental health care held a negative connotation.

**BHNAS for the Future.** The first round of BHNAS evaluations were completed in late Spring 2007. The vital real-time information it provided was briefed up to the Secretary of the Navy, and across multiple Echelon 1 and 2 commands. A second round of assessments focusing on the status of hundreds of IAs assigned to Navy Provisional Detainee Battalions (Iraqi prisons) ran through the Fall of 2007, and is expected to reveal the same important insights as BHNAS I. That data will be analyzed in winter 2008, and represents NHRC's continuing efforts to support the health, safety, readiness, and performance of all US military forces.

Questions about the Navy Behavioral Health Needs Assessment can be directed to Dr. Jerry Larson at [Jerry.Larson@med.navy.mil](mailto:Jerry.Larson@med.navy.mil), or CDR Dave Service at [Dave.Service@med.navy.mil](mailto:Dave.Service@med.navy.mil).

## Social Events

NHRC's annual Halloween Chili and Brownie Cook-Off held on October 30th was a great success again this year. The Deployment Health and Respiratory Disease Departments added to the festivities with their incredible pumpkin carvings. With all the spooky décor and employees in costumes, fun was had by all.

The winter social event of the year was NHRC's Christmas party held at the Admiral Kidd Club on December 6th. This

event is planned throughout the year by the command social committee (CSC). With the games, music, gifts and good food, every one had a great time.

The CSC is constantly planning new events for a fun get together, even for just a hour or two. Look for flyers on the upcoming events or ask your department representative for more information.





## Spotlight

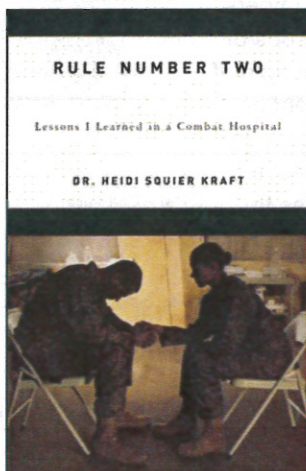
Heidi Kraft has published her new book titled *Rule Number Two: Lessons I Learned in a Combat Hospital*. 'Rule Number Two' refers to a quote from the old U.S. television show *M\*A\*S\*H*, which is set in a combat hospital. A senior doctor tells the others that in combat, "Rule number one is, young men die. And rule number two is, doctors can't change rule number one."

It started off as a poem called "The List" detailing the good and bad about Iraq (mostly bad). But when it caught the eye of a Vietnam-era Marine, LtCol Otto Lehrack, "The List" went viral on the internet. Lehrack encouraged her to expand on her list and share her perspective of providing psychological care on the battlefield. Kraft was reluctant at first, but began to think that these stories might help many, including herself.

In the book, she details her time in Iraq and

subsequent personal recovery. She talks freely about her struggle with posttraumatic stress disorder when she arrived home. "I was all wrong when I got back. I cried when things weren't sad and didn't cry when things were sad, I was far away...struggled with that until I needed help," Kraft said.

Kraft has been doing radio, print, television interviews, and book signings since her book was released on 24 October 2007. The book has already been labeled as a must-read by *The Boston Globe*. Beyond praise for the book, Kraft was recognized for her work with the U.S. military as a guest of honor at CNN's Second Annual Women's Event, the CNN Inspire Summit, hosted by Soledad O'Brien. The Summit took place before a live audience at Time Warner Center in New York.



*"RULE NUMBER TWO is a powerful firsthand account of providing comfort amidst the chaos of war, and of what it takes to endure."* - Little Brown and Company (Publisher)

## Recent Publications & Presentations

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Readiness Through  
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## Command Corner



**CAPT Kerry Thompson**  
Commanding Officer

### NHRC's Role in DoD Medical R&D:

#### Think Joint and Expeditionary

We've all heard and embraced the *'jointness'* message over the past 10 years or more, and have

actively coordinated our R&D efforts with our Army and Air Force counterparts. Over time, NHRC has evolved into the DoD's lead performer for expeditionary medical issues. Our Medical Mission Support team provides casualty estimation, supply and expeditionary treatment facility configuration studies and analyses to all of the services. The Navy/Marine Corps Combat Trauma Registry captures data on all service members treated at our Level 1 and 2 facilities in theater, which are then integrated with the Joint Trauma Registry in San Antonio. Our Deployment Health Research and Behavioral Sciences

Departments (funded by numerous DoD sources) track deployment-related health issues, and develop behavioral interventions specific to the military culture. Lastly, our Warfighter Performance team is now looking at physical conditioning strategies to make our personnel more effective and resilient in combat. Regardless of how the DoD eventually organizes its medical R&D activities and programs, NHRC will continue to provide joint solutions for expeditionary medical issues.

